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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,348	11/26/2003	Michael Conrad	07781.0117-00000	6160
22852 7590 09/28/2007 FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER ROBINSON, GRETA LEE	
			ART UNIT 2168	PAPER NUMBER
			MAIL DATE 09/28/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/721,348	<b>Applicant(s)</b> CONRAD ET AL.	
	<b>Examiner</b> Greta L. Robinson	<b>Art Unit</b> 2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-20,22,24,26-30,32-43 and 45-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,22,24,26-28,45 and 56-58 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 9-20, 29-30, 32-43, 46-55 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 20, 2007 and March 03, 2007 has been entered.

2. Claims 1, 7, 14, 24, 37 and 56 have been amended. Claims 2, 8, 21, 25, 31 and 44 have been cancelled.

### ***Drawings***

3. The drawings were received on July 20, 2007. These drawings are acceptable.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-5, 22-28, 45, 46 and 56-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holenstein et al. US Patent Application Publication No. 2002/0133507 A1 in view of Cooke et al. US Patent Application Publication No. 2003/0093431 A1.

Regarding claim 1, **Holenstein et al.** teaches a method for replicating one or more data objects from a source system to a target system [note: paragraph 0022 "the scope of the invention includes schemes where replication occurs between more than two databases"; paragraph 0023 "Replication-duplicating the contents of at least a portion of data records held in a source database to a target database" ], the method comprising:

providing an electronic data element comprising a first data field and a second data field, wherein the first data field contains data representing an identifier assignable to one or more data objects and the second data field contains data representing a state of the identifier; the second data field configured to store one of [note: paragraph 0029 "a database as defined comprises at least one table or file of data ...wherein the data is

typically arranged in records called rows"; paragraph 0041–0047 note eliminating or adding columns or rows in a target, changing the type, structure or length of a field]:

a) a first state, in which said electronic data element may be accessed by one or more data object processing operations and whereby said identifier is assignable to one or more data objects,

b) a second state, in which said electronic data element may not be accessed by one or more data object processing operations and whereby said identifier is assignable to one or more data objects, or

c) a third state, in which said electronic data element may not be accessed by one or more data object processing operations and whereby said identifier is not assignable to one or more data objects [note: Holenstein et al. teaches various schemes may be implemented or defined see paragraph 0052, 0061, paragraphs 0136-0141, also paragraph 0164];

assigning the identifier to the one or more data objects [note: paragraph 0103 paragraph 0101-0103, paragraph 0124 –0126; paragraph 0164 the key is defined as one or more fields; paragraphs 0165 through 0181];

processing the one or more data objects in accordance with a software application [note: paragraphs 0164-0181];

storing the one or more data objects in accordance with software application [note: paragraphs 0164-0181];

changing the state of the identifier in the electronic data element to indicate that the one or more processed data objects are ready to be replicated from the source system to the target system [note: paragraphs 0164-0181]; and

replicating, in response to changing the state of the identifier, the one or more processed data objects from the source system to the target system [note: abstract; paragraphs 0023 and 0096; paragraphs 0164-0181; Figure 4].

Although Holenstein et al. teaches the invention substantially, they do not explicitly teach first state, a second state and a third state. However Holenstein et al. does teach a key may be used in association with the record to read and lock a record corresponding to I/O operations and various schemes may be implemented or defined see paragraph 0052, 0061, paragraphs 0136-0141, also paragraph 0164. **Cooke et al.** teaches a first, second and third states in association with managing replicated objects [see: paragraphs 0004 through 0011 "The states are containers for the changes to the database"]. It would have been obvious to one of ordinary skill at the time of the invention to have combined Cooke et al. with Holenstein et al. because Cooke et al. teaches each state is a container for changes and provides a means of managing replicated changes.

6. Regarding claim 3, wherein the first data field and the second data field are in a table [note: Holenstein et al, Figure 2A (14); Figure 3; Figure 4].

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7. Regarding claim 4, wherein the first data field is in a first table and the second data field in a second table [note: Holenstein et al., paragraph 0100-0105, Figure 2A; Figure 3].
8. Regarding claim 5, wherein the electronic data element is implemented in object oriented programming as an instance of a class [note: Holenstein et al., paragraphs 0006, 0027, 0052-0060, and 0069].
9. Regarding claims 22-23, comprises a globally unique identifier...time stamp [note: Holenstein et al., paragraph 0007 global coordinator; Figure 3 and Figure 8].
10. The limitations of system claims 24-28, 45-46, and 56 parallel method claims 1-5 and 22-23 therefore they are rejected under the same rationale.
11. Regarding claims 57 and 58, "wherein the software application is a business application ... enterprise resource planning software application" [see: Holenstein et al., paragraphs 0006, 0027, 0052-0060, and 0069].

***Allowable Subject Matter***

12. Claims 6, 7, 9-20, 29-30, 32-43 and 46-55 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

13. Applicant's arguments with respect to claims 1-5, 22-28, 45, 46 and 56-58 have been considered but are moot in view of the new ground(s) of rejection.

In the response Applicant argued the following:

- Figures 1, 2 and 7 have been amended to depict a table having a first data field configured to store an "ID" value, a second data field configured to store a state value (e.g. state I, II, or III), and a third data field configured to store a default indicator. In response to Applicants argument the drawing objection has been *withdrawn*.
- In response to the rejection cited under 35 USC 112 first paragraph, Applicant has amended the claim to recite "providing" citing support for the change.

Therefor the rejection is moot.

- Applicants amendment and arguments concerning the rejections cited under 35 USC 103(a) are found convincing, however an updated search concludes new grounds of rejection under 35 USC 103(a).
- Applicant's submission of a terminal disclaimer overcomes the provisional obviousness-type double patenting rejection.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

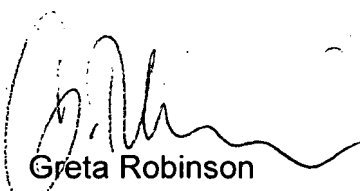
Jamil et al. US Patent Application Publication No 2003/0233523 A1

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greta L. Robinson whose telephone number is (571)272-4118. The examiner can normally be reached on M-F 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim T. Vo can be reached on (571)272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Greta Robinson  
Primary Examiner  
September 20, 2007